In the town of Baden, Switzerland, a drinking water transport and supply pipeline that was over 60 years old was renewed along the same route using the pipe bursting method. The contractor, Brunschwiler AG, a leading civil engineering company specialising in trenchless pipe renewal, required a pipe that would meet the engineering challenges associated with the replacement of the 72 metre section. SIMONA® SPC RC drinking water pipes were identified as the perfect solution.
Pipe insertion using the efficient, environmental friendly pipe bursting method

Initial situation
As part of road surfacing and concrete parapet works in Rütistrasse in Baden, Regionalwerke AG Baden decided to renew the existing drinking water pipe to the reservoir. The pipe was made of grey cast, had a diameter of 400 mm and had been in place since 1950. It had to be laid up a slope with a maximum incline of 80%.

Task
For reasons of safety, space and cost it was not possible to apply alternative methods of laying, such as horizontal drilling. To ensure efficient, successful project realisation using the pipe bursting method, the pipe material therefore had to meet the following requirements:

- Excellent bond and shear strength between inner pipe and protective jacket
- No crack propagation from the protective jacket into the inner pipe
- Extremely effective protection against major physical damage such as notches, abrasion and wear (PP Protect)

In addition, the period available for renewing the pipeline was only three weeks.

Solution
The pipe used was a SIMONA® SPC RC drinking water pipe, d = 450 mm, with a polypropylene protective jacket. On account of its high level of resistance to physical damage and owing to the enormous bond strength of its protective jacket, this pipe is ideal for a displacement method such as static pipe bursting.

With the aid of the efficient, trenchless pipelaying method it was no problem to complete the work within the specified timeframe.

Thanks to good collaboration between all the contractors involved in the project and strict adherence to project planning, the construction project was completed without any complications and to everyone's satisfaction.

Further information
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